

Title (en)

METHOD OF PRODUCING AN MOS TRANSISTOR

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES MOS-TRANSISTORS

Title (fr)

PROCEDE DE FABRICATION D'UN TRANSISTOR MOS

Publication

**EP 0839386 B1 20001004 (DE)**

Application

**EP 96920735 A 19960702**

Priority

- DE 9601174 W 19960702
- DE 19526184 A 19950718

Abstract (en)

[origin: WO9704480A1] When an MOS transistor is produced in a substrate (1), source/drain regions (9) and a doped gate electrode (10) are formed simultaneously by out-diffusion out of a doped layer (8), the distribution of the dopant in the source/drain regions (9) being adjusted by a permeable diffusion barrier (7) on the surface of the source/drain regions (9). Furthermore, a dopant barrier (3') can be provided, which prevents dopant passing out of the gate electrode (10) and into the semiconductor substrate (1).

IPC 1-7

**H01L 21/225; H01L 21/336**

IPC 8 full level

**H01L 29/78** (2006.01); **H01L 21/225** (2006.01); **H01L 21/28** (2006.01); **H01L 21/336** (2006.01); **H01L 29/08** (2006.01); **H01L 29/49** (2006.01)

CPC (source: EP KR US)

**H01L 21/18** (2013.01 - KR); **H01L 21/225** (2013.01 - KR); **H01L 21/2256** (2013.01 - EP US); **H01L 21/28035** (2013.01 - EP US);  
**H01L 29/0847** (2013.01 - EP US); **H01L 29/4916** (2013.01 - EP US); **H01L 29/4925** (2013.01 - EP US); **H01L 29/6656** (2013.01 - EP US);  
**H01L 29/66575** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**WO 9704480 A1 19970206**; DE 19526184 A1 19970403; DE 59605967 D1 20001109; EP 0839386 A1 19980506; EP 0839386 B1 20001004;  
JP H11509370 A 19990817; KR 19990028930 A 19990415; TW 306060 B 19970521; US 5998271 A 19991207

DOCDB simple family (application)

**DE 9601174 W 19960702**; DE 19526184 A 19950718; DE 59605967 T 19960702; EP 96920735 A 19960702; JP 50613897 A 19960702;  
KR 19980700232 A 19980113; TW 85108043 A 19960703; US 98323998 A 19980112